CLAIMS

What is claimed is:

1 · 1.   A method comprising:

2   assembling tokens that define processing for producing a graphical state;

3   assembling a shell rasterizer using the tokens;

4   selectively modifying portions of the shell rasterizer with replacement logic;

5 and

6   selectively inserting memory management logic into portions of the shell

7 rasterizer to produce a modified rasterizer.

1 2.   The method of claim 1 further comprising associating a pointer reference to

2 a location of the modified rasterizer in a hash table, wherein the pointer reference is

3 hashed based on the graphical state.

1 3.   The method of claim 1 further comprising returning a pointer reference after

2 a subsequent request is received for the graphical state.

1 4.   The method of claim 1 wherein selectively modifying the portions further

2 comprises determining a machine architecture that processes the method in order to

3 select the portions.

1 5.   The method of claim 1 wherein selectively inserting the memory

2 management logic includes inserting the memory management logic based on

3 simulated memory states for an executing shell rasterizer.

1 6.   The method of claim 5 wherein selectively inserting the memory

2 management logic further includes inserting the memory management logic using a

3 memory interface associated with memory management for a machine architecture

4 that processes the method.

1   7.   A method comprising:

2   selectively replacing rasterizer logic in a rasterizer based on an architecture

3 of a machine that processes the rasterizer;

4   selectively inserting memory management logic into the rasterizer using

5 properties of the architecture; and

6   indexing the modified rasterizer in memory.

1   8.   The method of claim 7 wherein selectively replacing rasterizer logic includes

2 varying the rasterizer logic based on the properties and a graphical state.

1   9.   The method of claim 7 wherein selectively inserting the memory

2 management logic includes selecting the memory management logic based on

3 simulating the execution of the rasterizer on the architecture.

1   10.   The method of claim 7 wherein selectively inserting the memory

2 management logic includes adding pushing and popping instructions for adding and

3 removing portions of the memory management logic from a stack.

1   11.   The method of claim 7 wherein indexing the rasterizer includes hashing a

2 pointer reference to the rasterizer, wherein the pointer reference is hashed based on

3 a graphical state associated with the rasterizer.

1   12.   The method of claim 7 further comprising returning the modified rasterizer

2 or a pointer reference to the modified rasterizer after a request for the modified

3 rasterizer is received.

1   13.   An article having a machine accessible medium having associated

2 instructions, wherein the instructions, when executed, produce a rasterizer, the

3 machine comprising at least one component performing:

4   assembling a shell rasterizer from a provided graphical state;

5   modifying the shell rasterizer with replacement logic and memory

6   management logic to produce a modified rasterizer; and

7   indexing the modified rasterizer based on the provided graphical state.

1   14.   The article of claim 13 wherein the instructions further comprise flushing

2   memory used for producing the modified rasterizer after indexing the rasterizer.

1   15.   The article of claim 13 wherein the instructions further comprise selecting

2   the replacement logic and the memory management based on properties of an

3   architecture for the machine and the provided graphical state.

1   16.   The article of claim 13 wherein the instructions further comprise acquiring

2   the replacement logic from a library of routines associated with performing

3   rasterizer operations.

1   17.   The article of claim 13 wherein the instructions further comprise acquiring

2   the memory management logic based on an application programming interface

3   (API) library associated with a memory stack of a machine.

1   18.   A system, comprising:

2   a token building application that assembles a processing order needed to

3   produce a graphical state; and

4   a composing application that assembles a generic shell rasterizer to satisfy

5   the processing order;

6   wherein the composing application also dynamically replaces and inserts

7   logic into the shell rasterizer to produce a modified rasterizer.

1   19.   The system of claim 18 further comprising an indexing application for

2   associating the graphical state with a pointer reference to a location of the modified

3   rasterizer.

1   20.   The system of claim 18 wherein the composing application uses replacement

2   logic selected for a specific machine architecture.

1   21.   The rasterizer building system of claim 18 wherein the composing

2   application uses insertion logic selected based on a stack interface associated with a

3   machine architecture.

1   22.   A data structure residing in a computer-accessible medium for producing a

2   rasterizer image, the data structure comprising:

3   shell logic produced from a graphical state;

4   replacement logic that selectively replaces portions of the shell logic based

5   on an architecture of a machine that will process the data structure; and

6   insertion logic that is selectively intertwined into the shell logic to perform

7   memory management when the rasterizer data structure is processed.

1   23.   The data structure of claim 22 wherein the data structure is dynamically

2   generated on the machine after the graphical state is detected.

1   24.   The data structure of claim 22 wherein the data structure is prefabricated and

2   made accessible on the machine based on the graphical state and the machine.

1   25.   The data structure of claim 22 wherein a reference to the data structure is

2   indexed based on the graphical state.